CLAIMS

1. Secure electronic entity (11) including means (23) adapted to store one or more objects, which entity is characterized in that it includes:

- measuring means (18) for measuring the time that has elapsed from a reference time of day (Dref) associated with said object,
- storage means (19) for storing a lifespan (V) assigned to said object, the storage means (19) co-operating with the time measuring means (18) to compare the elapsed time and said lifespan (V), and
- updating and invalidation means (21) for updating said lifespan of the object or to render the object temporarily or permanently unusable if the result of said comparison is that the elapsed time has reached or passed the lifespan (V).

2. Secure electronic entity (11) according to Claim 1, characterized in that said lifespan (V) corresponds to the total time of real use of the object.

3. Secure electronic entity (11) according to Claim 1, characterized in that said lifespan (V) is a time period independent of the total time of real use of the object.

4. Secure electronic entity (11) according to Claim 1, 2 or 3, characterized in that the time measuring means (18) are adapted to provide a measurement of the time that has elapsed since the reference time of day (Dref) when the electronic entity (11) is not supplied with power by an external power supply.

5. Secure electronic entity (11) according to Claim 1, 2 or 3, characterized in that the time measuring means (18) are adapted to supply a measurement of the time that has elapsed since the reference time of day (Dref) when the electronic entity (11) is not supplied with electrical power.

6. Secure electronic entity (11) according to any one of the preceding claims, characterized in that the time measuring means (18) are adapted to supply a measurement of the time that has elapsed since the reference time of day (Dref) independently of any external clock signal.

7. Secure electronic entity (11) according to any one of the preceding claims, characterized in that the time measuring means (18) include means for comparing two times of day.

8. Secure electronic entity (11) according to any one of the preceding claims, characterized in that the means (19) for storing the lifespan (V) include a secure entity and are situated inside or outside said electronic entity (11).

9. Secure electronic entity (11) according to any one of the preceding claims, characterized in that the object is an operating system, a secret code, a file, a file system, an application or access rights.

10. Secure electronic entity (11) according to any one of the preceding claims, characterized in that the reference time of day (Dref) is the time of day of creation of the object.

11. Secure electronic entity (11) according to any one of the preceding claims, characterized in that it includes one or more subsystems (17) comprising:

- a capacitive component (20) subject to leakage across its dielectric space, means being provided for coupling said capacitive component to an electrical power supply to be charged by said electrical power supply, and
- means (22) for measuring the residual charge in the capacitive component (20), said residual charge being at least in part representative of the time that has elapsed since the capacitive component (20) was decoupled from the electrical power supply.

12. Secure electronic entity (11) according to the preceding claim, characterized in that said means (22) for measuring the residual charge are included in said time measuring means (18).

13. Secure electronic entity (11) according to Claim 11 or 12, characterized in that the capacitive component (20) is an MOS capacitor whose dielectric space consists of a silicon oxide.

14. Secure electronic entity (11) according to Claim 11, 12 or 13, characterized in that the means (22) for measuring the residual charge comprise a field-effect transistor (30) having an insulative layer (34), the capacitive component (20) includes an insulative layer (24), and the thickness of the insulative layer (34) of the field-effect transistor (30) is significantly greater than the thickness of the insulative layer (24) of the capacitive component (20).

15. Secure electronic entity (11) according to the preceding claim, characterized in that the thickness of the insulative layer (24) of the capacitive component (20) is from 4 to 10 nanometers.

16. Secure electronic entity (11) according to Claim 13, 14 or 15, characterized in that it includes: at least two subsystems (17A, 17B) each comprising:

- a capacitive component subject to leakage across its dielectric space,
- means enabling said capacitive component to be coupled to an electrical power supply in order to be charged by said electrical power supply, and
- means for measuring the residual charge in the capacitive component,

said residual charge being at least in part representative of the time which has elapsed after the capacitive component was decoupled from the electrical power supply, said subsystems (17A, 17B) comprising

capacitive components having different leaks across their respective dielectric spaces, and said secure electronic entity (11) further including means (14, 15, T) for processing respective measured residual charges in said capacitive components to extract from said measurements information substantially independent of heat input to said entity (11) during the time that has elapsed since the reference time of day (Dref).

17. Secure electronic entity (11) according to the preceding claim, characterized in that said processing means (14, 15, T) include software for calculating a predetermined function for determining said information as a function of said measurements and substantially independently of heat input.

18. Secure electronic entity (11) according to any one of the preceding claims, characterized in that it is a microcircuit card.

19. Secure electronic entity (11) according to any one of the preceding claims, characterized in that it is a PCMCIA card.